



Australian Government

FWPSAW3244 Align sawing production systems

Release: 1

FWPSAW3244 Align sawing production systems

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 5.0.

Application

This unit of competency describes the skills and knowledge required to align chipper heads and circular or band sawing machines, including the feeding system, and prepare machines for return to production.

The unit applies to individuals who align sawing production systems in a sawmill.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Sawmilling and Processing (SAW)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Review work order to determine job requirements and, where required, seek clarification from appropriate personnel 1.2 Review workplace health and safety requirements, including the use of personal protective equipment, equipment lock-out and safe manual handling techniques 1.3 Identify, assess and take actions to mitigate risks and hazards

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	associated with aligning sawing production systems 1.4 Identify workplace environmental protection procedures for minimising and disposing of waste material, cleaning tools and equipment, and maximising energy efficiency 1.5 Select appropriate tools and equipment for the work task and check for safety and operational effectiveness according to manufacturer specifications 1.6 Access and interpret machine records and manufacturer manuals, and assess machine performance
2. Conduct shutdown	2.1 Implement equipment lock-out procedures according to workplace safety procedures and manufacturer instructions 2.2 Remove, replace and temporarily store mechanical components to provide access to alignment parts 2.3 Remove, replace and temporarily locate guides 2.4 Keep the work area clear of dust, off-cuts and debris according to workplace safety procedures
3. Align chipper heads	3.1 Align chipper head and feed system components according to manufacturer instructions 3.2 Check chipper head for free operation according to manufacturer instructions 3.3 Replace blades and knives and prepare machine for return to production 3.4 Record and report corrective actions that are taken to realign chipper heads
4. Align sawing machines	4.1 Identify conditions related to saw blades and accuracy of cuts that indicate that sawing machine is out of alignment 4.2 Check alignment of the sawing machine according to manufacturer and workplace procedures 4.3 Establish current alignment of sawing machine, identifying corrective actions required 4.4 Align machine to infeed and outfeed system according to manufacturer instructions 4.5 Align feed systems components to the line of feed according to manufacturer instructions

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.6 Align guiding system to the line of feed according to manufacturer instructions 4.7 Align saw blades to the line of feed according to manufacturer instructions 4.8 Replace all tools and machine components and re-assemble machine for return to production 4.9 Record and report corrective actions that are taken to realign sawing machine

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Extracts essential information from complex technical documents and manuals to determine safe alignment procedures
Writing	Prepares routine written reports using the required format, language and structure
Oral communication	Employs active listening and questioning to clarify content of equipment history records
Numeracy	- Performs precise mathematical calculations to determine the correct alignment of key parts of the sawing system according to specified settings - Uses basic mathematical symbols and conventions in completing workplace reports related to alignment activities
Navigate the world of work	Understands main tasks, responsibilities and boundaries of own role
Interact with others	Uses modes of communication suitable to purpose to confirm and clarify understanding
Get the work done	Recognises and responds to routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW3244 Align sawing production systems	FWPSAW3209 Align sawing production systems	Reworded application statement; updated element 3 and further specified tasks in element 4; updated performance criteria, knowledge evidence and assessment conditions for mapping	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPSAW3244 Align sawing production systems

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- aligned the following types of sawing production systems:
 - chipper head
 - circular and band sawing machines and feed systems including line bars and carriages
- in doing the above job, the individual has:
 - followed work order and relevant workplace health and safety and environmental protection procedures
 - implemented equipment shutdown procedures
 - assessed the performance of sawing machine and system
 - re-assembled sawing production systems and tested for operational effectiveness
 - identified routine processing and equipment faults and resolved or reported to appropriate personnel.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose, features and operation of:
 - chipper heads
 - sawing machines and feed systems including line bars and carriages
- purpose, features and operation of tools and equipment used to align sawing production systems
- advantages and disadvantages of using laser or surveying equipment to conduct major alignments
- conditions related to saw blades and accuracy of cuts that indicate that sawing machine is out of alignment

- reasons for aligning various parts of sawing systems:
 - reducing sawing deviation, vibration, and downtime
 - increasing production rates
 - improving quality of sawn finish
- identification of alignment factors that will impact on the performance of the sawing production systems
- methods for:
 - assessing machine and system performance against recovery percentages, product sizing and/or standard deviation
 - dismantling mechanical components of production machines
 - aligning chipper heads
 - aligning sawing machines
 - re-assembling production machines and testing operational effectiveness
- tools and equipment used to align sawing production systems:
 - tools for removing and adjusting mechanical parts
 - jigs
 - precision measuring equipment
 - portable electrical lighting
 - feeler gauges
 - engineers' rules
 - vernier callipers
 - micrometers
 - plumb lines
 - piano wire or string lines
 - pointer
 - markers
- types of risks and hazards and mitigation strategies associated with aligning saw production systems
- workplace policies and procedures specific to aligning sawing production systems:
 - workplace health and safety, with particular emphasis on equipment lock-out, use of personal protective equipment (PPE) and safe manual handling
 - communication reporting lines
 - recording and reporting of processing and equipment faults.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a sawmill or an environment that accurately represents workplace conditions
- resources, equipment and materials:

- tools and equipment for aligning sawing production systems
- wood chipping equipment
- sawing machines and feed systems, including line bars and carriages
- PPE suitable for aligning sawing production systems
- specifications:
 - manufacturer instructions for use, repair and maintenance of equipment
 - work order with specific instructions for aligning sawing production systems in specified equipment
 - equipment history records
 - template documents for recording operational problems and equipment faults
 - workplace procedures for aligning sawing production systems.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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